

We claim:

1. An ordered liquid crystalline phase cleansing composition comprising:

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(a) about 3 to 30% by weight of a surfactant system including at least one surfactant selected from an anionic, amphoteric, cationic and nonionic surfactant and mixtures thereof, wherein at least one anionic surfactant must be present;

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(b) about 0.1% to 15% by wt. of an ordered liquid crystalline phase inducing structurant;

(c) about 0.1% to 10% of a cationic polymer;

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(d) an effective concentration of a solid particulate optical modifier for exhibiting a specific set of optical properties on skin characterized by a set of Tristimulus Color Values L, a*, and b*; a reflectivity change, and an opacity change, that provides at least a 5% change in at least one of the specific optical properties when said cleansing composition is applied to skin and then rinsed off using the In-vitro Visual Assessment Protocol ;

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(e) wherein said ordered liquid crystalline phase composition has a viscosity of about 40,000 to about 300,000 cps at 25 C as measured via the T-bar method; and

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(f) wherein said ordered liquid crystalline phase composition contains less than about 0.025% by weight of an organic, non crosslinked, cationic homopolymer or copolymer having a cationic charge

J6894(c) Shiloach et al.

density of from about 2 meq/gm to about 10 meq/gm and an average molecular weight of from about 1,000 to about 5,000,000.

- 5 2. A composition according to claim 1 wherein the visual attribute targeted by the optical modifier is selected from skin shine, skin color or skin optical uniformity, and combinations thereof.
- 10 3. The composition according to claim 2 wherein the change in L value is in the range from about 0 to ± 10 , the reflectance change in the range from about 0 to $\pm 300\%$, and the change in opacity in the range from about 0 to $\pm 20\%$ with the proviso that the change in L value, reflectance change and opacity change are not all zero so as to provide noticeable skin shine when said cleansing composition is applied to skin and then rinsed off using the In-vitro
15 Visual Assessment Protocol.
- 20 4. The composition according to claim 2 wherein the change in L value is in the range from about 0 to ± 10 , the change in the a^* value is in the range from about 0 to ± 10 , a change in the b^* value in the range from about 0 to ± 10 , the change in opacity in the range from about 0 to $\pm 50\%$, and the reflectance change is within the normal skin reflectivity range of about $\pm 10\%$, with the proviso that the change in L value, a^* , b^* and opacity change are not all zero so as to provide noticeable skin lightening or color change when said cleansing composition is applied to skin and then rinsed off using the In-vitro
25 Visual Assessment Protocol.
5. The composition according to claim 2 wherein the change in L value is in the range from about 0 to ± 5 , the reflectance change is in the range from about 0 to $\pm 100\%$, the change in opacity is in the range from about 0 to $\pm 50\%$, and

J6894(c) Shiloach et al.

the change in a^* and b^* are within normal skin color range of about $\pm 10\%$ for each of a^* or b^* , with the proviso that the change in L value, reflectance change and opacity change are not all zero so as to provide noticeable skin optical uniformity change when said cleansing composition is applied to skin and then rinsed off using the In-vitro Visual Assessment Protocol.

6. A composition according to claim 1 wherein the cationic polymer has a charge density of at least about 0.7 Meq/g.
- 10 7. A composition according to claim 1 wherein the ratio of anionic surfactant to a surfactant that has a positive charge at a pH of about 6.5 or below is in the range of about 6 : 1 to about 1 : 2.
- 15 8. A composition according to claim 7 wherein the surfactant with the positive charge is an amphoteric surfactant.
9. A composition according to claim 8 wherein the amphoteric surfactant is selected from betaine, alkylamidopropyl betaine, sulphobetaine, amphotacetate and blends thereof.
- 20 10. A composition according to claim 1 further comprising greater than about 30% by weight water.
11. A composition according to claim 1 wherein the ordered liquid crystalline phase cleansing composition is a lamellar composition.
- 25 12. A composition according to claim 1 wherein the solid particulate optical modifier has an average diameter of at least about 30 microns.

J6894(c) Shiloach et al.

13. A composition according to claim 1 wherein the solid particulate optical modifier is present in a minimum concentration of at least about 0.2 % by wt.

14. A composition according to claim 1 wherein the surfactant system is present at a concentration level of at least about 7% by weight.

15. A composition according to claim 1 wherein the anionic surfactant is selected from a C8 -C16 alkyl sulfate and/or alkyl ether sulfates, fatty acid soaps, taurates, sulfosuccinates, glycinates, sarcosinates or blends thereof and the amphoteric surfactant is selected from amphotacetates, betaines and amidoalkyl betaines or derivatives or blends thereof.

16. A composition according to claim 1 wherein the ordered liquid crystalline phase inducing structurant is selected from a C8 to C24 alkenyl or branched alkyl fatty acid or ester thereof, a C8 to C24 alkenyl or branched alkyl alcohol or ether thereof, a C5 to C14 linear alkyl fatty acid, trihydroxystearin, or derivatives or mixtures thereof.

17. A composition according to claim 16 wherein the ordered liquid crystalline phase inducing structurant is selected from lauric acid, oleic acid, palm kernel acid, palm fatty acid, coconut acid, isostearic acid, or derivatives or mixtures thereof.

18. A composition according to claim 1, comprising about 10 to 25% surfactant.

19. The composition according to claim 1 wherein the particulate optical modifier is selected from organic pigments, inorganic pigments, polymers, titanium oxide, zinc oxide, colored iron oxide, chromium oxide/hydroxide/hydrate, alumina, silica, zirconia, barium sulfate, silicates, polyethylene, polypropylene,

J6894(c) Shiloach et al.

nylon, ultramarine, alkaline earth carbonates, talc, sericite, mica, synthetic mica, polymers, platy substrate coated with organic and inorganic materials, bismuth oxychloride, barium sulfate, or blends and physical aggregates thereof.

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20. The composition according to claim 1 wherein the particulate optical modifier possesses color generated through fluorescence, adsorption, iridescence or a combination thereof.

10 21. The composition according to claim 3 wherein greater than about 10 % by wt. of the particulate optical modifier is further defined by an exterior surface refractive index, geometry, and specific dimensions wherein:

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- i) the exterior surface has a refractive index of about 1.8 to 4.0;
 - ii) the geometry is platy, cylindrical or a blend thereof; and
 - iii) the specific dimensions are about 10 to 200 μm average diameter in the case of a platy particle, or about 10 to 200 μm in average length and about 0.5 to 5.0 μm in average diameter in the case of a cylindrical particle.

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22. The composition according to claim 4 wherein greater than about 10 % by wt. of the particulate optical modifier is further defined by an exterior surface refractive index, geometry, and specific dimensions wherein:

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- i) the exterior surface has a refractive index of about 1.3 to 4.0,
 - ii) the geometry is spheroidal, platy or a blend thereof,
 - iii) the specific dimensions are about 1 to 30 μm average diameter in the case of a platy particle, or about 0.1 to 1 μm in average diameter in the case of a spheroidal particle; and

J6894(c) Shiloach et al.

- iv) optionally the particulate optical modifier having fluorescence color, absorption color, interference color or a combination thereof.

23. The composition according to claim 5 wherein greater than about 10 % by wt.

5 of the particulate optical modifier is further defined by an exterior surface refractive index, geometry, and specific dimensions wherein:

- i) the exterior surface has a refractive index of about 1.3 to 2.0,
- ii) the geometry is spheroidal, platy, cylindrical or a blend thereof,
- 10 iii) the specific dimensions are about 0.1 to 200 μm in average diameter in the case of a spheroidal particle, about 1 to 10 μm average diameter in the case of a platy particle, or about 1 to 10 μm in average length and about 0.5 to 5.0 μm in average diameter in the case of a cylindrical particle, and
- 15 iv) optionally the particulate optical modifier having fluorescence color, absorption color, interference color or a combination thereof.

24. The composition according to claim 1 wherein the particulate optical modifier
20 is composed predominately of platy particles further defined by having an average plate diameter of about 10 μm to 200 μm and a refractive index of at least about 1.8.

25. The composition according to claim 1 wherein the cationic polymer is selected
25 from Merquat® 100 or 2200, Jaguar® C17 or C13S, Salcare® Supre® 7, SC10, or SC30; Gafquat® HS100 or 755, and Luviquat® FC370, FC550, HM552 or FC905; or blends thereof.

J6894(c) Shiloach et al.

26. The composition according to claim 1 wherein the particulate optical modifier contains a surface modification selected from amino acids, proteins, fatty acids, lipids, phospholipids (lecithin), anionic and/or cationic oligomers/polymers or blends or derivatives thereof to enhance the deposition of the optical modifier on to the skin.

27. A method for depositing a particulate optical modifier on to the skin or hair with an ordered liquid crystalline phase cleansing composition, comprising the steps of:

(a) providing said solid particulate optical modifier in said cleansing composition, the composition comprising:

(1) about 3 to about 30% by weight of a surfactant system including at least one surfactant selected from an anionic, amphoteric, cationic and nonionic surfactant and mixtures thereof, wherein at least one anionic surfactant must be present;

(2) about 0.1% to about 15% by wt. of an ordered liquid crystalline phase inducing structurant;

(3) wherein said ordered liquid crystalline phase composition has a viscosity of about 40,000 to about 300,000 cps at 25 C; and

(4) wherein said ordered liquid crystalline phase composition contains less than about 0.025% by weight of an organic, non crosslinked, cationic homopolymer or copolymer having a cationic charge density of from about 2 meq/gm to about 10

J6894(c) Shiloach et al.

meq/gm and an average molecular weight of from about 1,000
to about 5,000,000;

(b) applying said cleansing composition to the skin or hair; and

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(c) rinsing off said cleansing composition.

28. The method of claim 27 wherein the ordered liquid crystalline phase cleansing
composition is a lamellar composition.

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